

Supplementary Material to “Genome-wide identification and evolutionary view of ALOG gene family in Solanaceae”

Table S1 – Information regarding plant species genomes searched for ALOG genes, database searched, and total number of genes found for each species. * Solanaceae species used in Dataset 1.

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Poumb	<i>Porphyra umbilicalis</i>	Rhodophyta	Bangiaceae	Brawley et al. 2017	No hits found
Osluc	<i>Ostreococcus lucimarinus</i>	Chlorophyta	Bathycoccaceae	Palenik et al. 2007	No hits found
Ostau	<i>Ostreococcus tauri</i>	Chlorophyta	Bathycoccaceae	Blanc-Mathieu et al. 2014	No hits found
Bobra	<i>Botryococcus braunii</i>	Chlorophyta	Botryococcaceae	Browne et al. 2017	No hits found
Chrei	<i>Chlamydomonas reinhardtii</i>	Chlorophyta	Chlamydomonadaceae	Shrager et al. 2003	No hits found
Chzof	<i>Chromochloris zofingiensis</i>	Chlorophyta	Chromochloridaceae	Roth et al. 2017	No hits found
Dusal	<i>Dunaliella salina</i>	Chlorophyta	Dunaliellaceae	Polle et al. 2017	No hits found

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Mipus	<i>Micromonas pusilla</i>	Chlorophyta	Mamiellaceae	van Baren et al. 2016	No hits found
Misp.	<i>Micromonas sp.</i>	Chlorophyta	Mamiellaceae		No hits found
Cosub	<i>Coccomyxa subellipsoidea</i>	Chlorophyta	Coccomyxaceae	Blanc et al. 2012	No hits found
Vocar	<i>Volvox carteri</i>	Chlorophyta	Volvocaceae	Prochnik et al. 2010	No hits found
Mevir	<i>Mesostigma viride</i>	Streptophyta/Charophyta/Mesostigmatophyceae	Mesostigmatales/Mesostigmataceae	Wang et al. 2020	No hits found
Chatm	<i>Chlorokybus atmophyticus</i>	Streptophyta/Charophyta/Chlorokybophyceae	Chlorokybales/Chlorokybophyceae	Wang et al. 2020	No hits found
Klnit	<i>Klebsormidium nitens</i>	Streptophyta/Charophyta/Klebsormidiophyceae	Klebsormidiales/Klebsormidiaceae	Hori et al. 2014	No hits found
Coorb	<i>Coleochaete orbicularis</i>	Streptophyta/Charophyta/Coleochaetophyceae	Coleochaetales/Coleochaetaceae	Sablok et al. 2019	1
Nimir	<i>Nitella mirabilis</i>	Streptophyta/Charophyta/Charophyceae	Charales/Characeae		1
Chbra	<i>Chara braunii</i>	Streptophyta/Charophyta/Charophyceae	Charales/Characeae	Nishiyama et al. 2018	1
Sppra	<i>Spirogyra pratensis</i>	Streptophyta/Charophyta/Zygnematophyceae	Zygnematales/Zygnemataceae		1

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Spmus	<i>Spirogloea muscicola</i>	Streptophyta/Charophyta/ Zygnematophyceae	Spirogloales/Spirogloeaceae		3
Meend	<i>Mesotaenium endlicherianum</i> SAG 12.97	Streptophyta/Charophyta/ Zygnematophyceae	Zygnematales/Mesotaeniacea	Cheng et al. 2019	1
Mekra	<i>Mesotaenium kramstae</i> <i>Lemmermann</i>	Streptophyta/Charophyta/ Zygnematophyceae	Zygnematales/Mesotaeniacea		1
Zcycl	<i>Zygnema cf. cylindricum</i> SAG 698-1a	Streptophyta/Charophyta/ Zygnematophyceae	Zygnematales/Zygnemataceae		2
Zycir SAG698	<i>Zygnema circumcarinatum</i> SAG 698-1b	Streptophyta/Charophyta/ Zygnematophyceae	Zygnematales/Zygnemataceae		1
Mapol	<i>Marchantia polymorpha</i>	Embriophyta/Marchantiophyta	Marchantiales/Marchantiaceae	Bowman et al. 2017	2
Cepur	<i>Ceratodon purpureus</i>	Embriophyta/Bryophyta	Dicranales/Ditrichaceae		2
Phpat	<i>Physcomitrella patens</i>	Embriophyta/Bryophyta	Funariales/Funariaceae	Lang et al. 2018	4
Spfal	<i>Sphagnum fallax</i>	Embriophyta/Bryophyta	Sphagnales/Sphagnaceae		5
Spmag	<i>Sphagnum magellanicum</i>	Embriophyta/Bryophyta	Sphagnales/Sphagnaceae		5

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Anagr	<i>Anthoceros agrestis</i>	Embriophyta/Anthocerophyta	Anthocerotales/Anthocerotaceae	Li et al. 2020	1
Anpun	<i>Anthoceros punctatus</i>	Embriophyta/Anthocerophyta	Anthocerotales/Anthocerotaceae	Li et al. 2020	1
Semoe	<i>Selaginella moellendorffii</i>	Tracheophyta/Lycopodiophyta	Selaginellales/Selaginellaceae	Banks et al. 2011	2
Dicom	<i>Diphasiastrum complanatum</i>	Tracheophyta/Lycopodiophyta	Lycopodiales/Lycopodiaceae		5
Ceric	<i>Ceratopteris richardii</i>	Tracheophyta/Monilophyta	Polypodiales/Pteridaceae	Marchant et al. 2019	5
Adcap	<i>Adiantum capillus</i>	Tracheophyta/Monilophyta	Polypodiales/Pteridaceae	Fang et al. 2022	3
Alspi	<i>Alsophila spinulosa</i>	Tracheophyta/Monilophyta	Cyatheaales/Cyatheaceae	Huang et al. 2022	6
Thpli	<i>Thuja plicata</i>	Spermatophyta/Gymnosperm	Pinales/Cupressaceae	See Wan et al. 2023	3
Piabi	<i>Picea abies</i>	Spermatophyta/Gymnosperm	Pinales/Pinaceae	See Wan et al. 2024	1
Pitae	<i>Pinus taeda</i>	Spermatophyta/Gymnosperm	Pinales/Pinaceae	See Wan et al. 2025	1
Amtri	<i>Amborella trichopoda</i>	Spermatophyta/Angiosperm (ANA-grade)	Amborellales/Amborellaceae	Amborella Genome Project 2013	4

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Nycol	<i>Nymphaea colorata</i>	Spermatophyta/Angiosperm (ANA-grade)	Nymphaeales/Nymphaeaceae	Zhang et al. 2019	5
Litul	<i>Liriodendron tulipifera</i>	Spermatophyta/Angiosperm (Magnoliids)	Magnoliales/Magnoliaceae	Chen et al. 2019	7
Cikan	<i>Cinnamomum kanehirae</i>	Spermatophyta/Angiosperm (Magnoliids)	Laurales/Lauraceae	Chaw et al. 2019	10
Nenuc	<i>Nelumbo nucifera</i>	Spermatophyta/Angiosperm (Basal Eudicot)	Proteales/ Nelumbonaceae	Ming et al. 2013	6
Aqcoe	<i>Aquilegia coerulea</i>	Spermatophyta/Angiosperm (Basal Eudicot)	Ranunculales/Ranunculaceae	Filiault et al. 2018	5
Poami	<i>Portulaca amilis</i>	Spermatophyta/Angiosperm (Eudicot)	Caryophyllales/Portulacaceae		8
Bevul	<i>Beta vulgaris</i>	Spermatophyta/Angiosperm (Eudicot)	Caryophyllales/Amaranthaceae	Dhom et al. 2013	8
Zomar	<i>Zostera marina</i>	Spermatophyta/Angiosperm (Monocot)	Alismatales/Zosteraceae	Olsen et al. 2016	9
Ancom	<i>Ananas comosus</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Bromeliaceae	Ming et al. 2015	5
Brdis	<i>Brachypodium distachyon</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae	The International Brachypodium Initiative 2010	10
Hovul	<i>Hordeum vulgare</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae	Beier et al. 2017	6

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Orsat	<i>Oryza sativa</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae		10
Sobic	<i>Sorghum bicolor</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae	Cooper et al. 2019	12
Zemay	<i>Zea mays</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae	Sun et al. 2022	11
Pavag	<i>Paspalum vaginatum</i>	Spermatophyta/Angiosperm (Monocot)	Poales/Poaceae		10
Hyque	<i>Hydrangea quercifolia</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Cornales/Hydrangeaceae		8
Vadar	<i>Vaccinium darrowii</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Ericales/Ericaceae	Yu et al. 2021	13
Heann	<i>Helianthus annuus</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Asterales/Asteraceae	Badouin et al. 2017	13
Migut	<i>Mimulus guttatus</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Lamiales/Phrymaceae		8
Oleur	<i>Olea europaea</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Lamiales/Oleaceae	Rao et al. 2021	14
Coara	<i>Coffea arabica</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Gentianales/Rubiaceae	Mekbib et al. 2022	12
Caann	<i>Capsicum annum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Kim et al. 2014	7

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Cabac	<i>Capsicum baccatum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Ahn et al. 2018	12
Cachi	<i>Capsicum chinense</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Kim et al. 2014	12
Dastr	<i>Datura stramonium</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Rajewski et al. 2021	10
Niatt	<i>Nicotiana attenuata</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Xu et al. 2017	14
Niben*	<i>Nicotiana benthamiana</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Kurotani et al. 2023	23
Nisyl	<i>Nicotiana sylvestris</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Sierro et al. 2013	12
Nitab*	<i>Nicotiana tabacum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Edwards et al. 2017	18
Nitom	<i>Nicotiana tomentosiformis</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Sierro et al. 2013	14
Peaxi	<i>Petunia axillaris</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Bombarely et al. 2016	11
Pehyb	<i>Petunia hybrida</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae		11
Peinf	<i>Petunia inflata</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Bombarely et al. 2016	13

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Sochi	<i>Solanum chilense</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Stam et al. 2019	12
Socom	<i>Solanum commersonii</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Aversano et al. 2015	13
Solyc*	<i>Solanum lycopersicum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	The Tomato Genome Consortium	12
Somel	<i>Solanum melongena</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Wei et al. 2020	11
Sopen	<i>Solanum pennellii</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Bolger et al. 2014	13
Sopim	<i>Solanum pimpinellifolium</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Wang et al 2020	12
Soste	<i>Solanum stenotomum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	Yan et al. 2021	13
Sotub*	<i>Solanum tuberosum</i>	Spermatophyta/Angiosperm (Eudicot/Asterid)	Solanales/Solanaceae	The Potato Genome Sequencing Consortium	13
Artha	<i>Arabidopsis thaliana</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Brassicales/Brassicaceae		10
Carub	<i>Capsella rubella</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Brassicales/Brassicaceae		11
Eusal	<i>Eutrema salsugineum</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Brassicales/Brassicaceae		10

Acronym	Species	Clade/Division or Lineages	Order/Family	Reference	N hits
Glm	<i>Glycine max</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Fabales/Fabaceae/Papilionoideae	Schmutz et al. 2010	23
Metru	<i>Medicago truncatula</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Fabales/Fabaceae/Papilionoideae	Pecrix et al. 2018	14
Phvul	<i>Phaseolus vulgaris</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Fabales/Fabaceae/Papilionoideae	Schmutz et al. 2014	16
Trpra	<i>Trifolium pratense</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Fabales/Fabaceae/Papilionoideae	de Vija et al. 2015	12
Eugra	<i>Eucalyptus grandis</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Myrtales/Myrtaceae	Myburg et al. 2014	11
Prper	<i>Prunus persica</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Rosales/Rosaceae	Verde et al. 2013	8
Cicle	<i>Citrus clementina</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Sapindales/Rutaceae	Wu et al. 2014	9
Maesc	<i>Manihot esculenta</i>	Spermatophyta/Angiosperm (Eudicot/Rosid)	Malpighiales/Euphorbiaceae	Bredeson et al. 2016	16